

# DOCUMENT RESUME

ED 089 191

CG 008 842

AUTHOR Pastrana, Ronald R.  
TITLE Career Guidance Service and ASVAB.  
PUB DATE Apr 74  
NOTE 34p.; Presented at the American Personnel and Guidance Association (New Orleans, Louisiana, April 1974)

EDRS PRICE MF-\$0.75 HC-\$1.85 PLUS POSTAGE  
DESCRIPTORS \*Career Education; \*Career Planning; \*Guidance Counseling; \*Guidance Programs; Occupational Information; Program Evaluation; Secondary School Students; Self Concept; Self Evaluation; Speeches; \*Vocational Counseling  
IDENTIFIERS \*Armed Service Vocational Aptitude Battery (ASVAB)

## ABSTRACT

This report documents and evaluates the efforts of Walt Whitman High School to provide career information and guidance to its students. The Career Guidance Service is composed of three elements: (1) Armed Service Vocational Aptitude Battery (ASVAB) Testing; (2) Career Workshop; and (3) Career Information Resource Center. The ASVAB is a group of nine paper and pencil tests that are combined into groups of two or more tests called Aptitude Areas. A single score is computed for each area. Justification for using ASVAB is based on the common knowledge that different occupations require different aptitudes, therefore, tests that measure specific aptitudes may predict success or failure with more accuracy than general intelligence or overall ability tests. The Career Workshop provides the student with updated and relevant information from a variety of people in the field. The Career Information Resources Center consists of reading materials, records, tapes, slides, and assorted free materials. The three elements of the Career Guidance Service provide a variety of experiences to help the student develop his ability to make tentative career choices based on realistic information about himself and the world of work. (Author/RWP)

ED 089191

CAREER GUIDANCE SERVICE AND ASVAB  
BY  
RONALD R. PASTRANA  
AMERICAN PERSONNEL AND GUIDANCE ASSOC.  
APRIL, 1974  
NEW ORLEANS, LOUISIANA

U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.

842

008

C6

FORMAL REPORT AND RELATED MATERIAL  
ON THE  
CAREER GUIDANCE SERVICE AND ASVAB  
BY  
RONALD R. PASTRANA  
AMERICAN PERSONNEL AND GUIDANCE ASSOC.  
APRIL, 1974  
NEW ORLEANS, LOUISIANA

CONTENTS

CAREER GUIDANCE SERVICE  
EVALUATION PROFILE OF THE CAREER GUIDANCE SERVICE  
UNDERSTAND MY APTITUDES

1974  
South Huntington Public Schools  
Huntington Station, New York

CAREER GUIDANCE SERVICE  
(A MODEL FOR DEVELOPING CAREER AND SELF AWARENESS)

by  
Ronald R. Pastrana

Occupational Services Corrdinator, Career Education Project  
Walt Whitman High School  
Huntington Station, New York

presented at the  
Interservice Counseling and Placement Battery (ASVAB) Workshop  
American Personnel and Guidance Association Convention

April 8 - 11, 1974

New Orleans, Louisiana

in cooperation with  
The Armed Forces Vocational Testing Group  
(Department of Defense)

## CAREER GUIDANCE SERVICE

### CONTENTS

1. General Statement
2. Objectives and Theoretical Structure
3. Career Guidance and Career Education
4. Elements of the Career Guidance Service (Chart)
5. Career Guidance Service (Brief Description)
  1. ASVAB Testing
  2. Career Workshop
  3. Career Information Resource Center
6. Concluding Statement

## GENERAL STATEMENT

This report documents the effort of Walt Whitman High School to provide career information and career guidance to its own students. The material discussed is intended to give an overview of a single but unique approach.

The Career Guidance Service was planned and developed as a school based MODEL for developing career and self awareness in high school students.

However the IDEA of career guidance was formalized in the late 1800's by Frank Parsons, father of the guidance movement in American education when he said:

"The procedure for career choosing should be: first, a clear understanding of yourself, aptitude, abilities, interests, resources, limitations, and other qualities; second, a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work; third, true reasoning on the relations of these two groups of facts."

## OBJECTIVES AND THEORETICAL STRUCTURE

The objectives of the Career Guidance Service are rooted in the basic career needs of the high school student today. These needs are as follows:

1. self-knowledge
2. career-knowledge
3. educational-knowledge
4. decision making experience
5. guidance and counselling

Information collected from the categories cited above will be useful in making tentative career decisions. It is the position of this writer that a career choice is just not a one shot deal, but a continuous life long process of making decisions based upon the individual's appraisal of his desires, needs, abilities and the realities of the occupational world. Although career choice is open to change at any point in an individual's life, the decisions made by the young person of high school age will undoubtedly be a dynamic factor in shaping his career later on in life.

In essence the Career Guidance Service provides opportunities to help the high school student to come to know himself and his potential as well as, the magnitude and realities of the occupational world.

## CAREER GUIDANCE AND CAREER EDUCATION

The fundamental assumption of the Career Guidance Service at Walt Whitman High School is that the providing of information for self-evaluation with respect to career opportunities cannot be left to chance, but should be a continuous guidance service within the school structure. Built into the "Service" is a recognition that to provide information is not enough but to plan experiences to increase the student's ability to use the information is the key to effective career decision making.

However the Career Guidance Service is only on facet of the Comprehensive Career Education Concept. In the words of U. S. Commissioner of Education, S. P. Marland, "all educational experiences, curriculum, instruction and counselling should be geared to preparation for economic independence and an appreciation for the dignity of work". The Commissioner further states that "Educators must be bent on preparing students either to become properly and usefully employed upon graduation from high school or to go on to further formal education. The student should be equipped occupationally, academically and emotionally to spin off from the system at whatever point he

chooses whether at age 16 as a craftsman apprentice, or age 30 as a surgeon, or age 60 as a newly trained practical nurse".

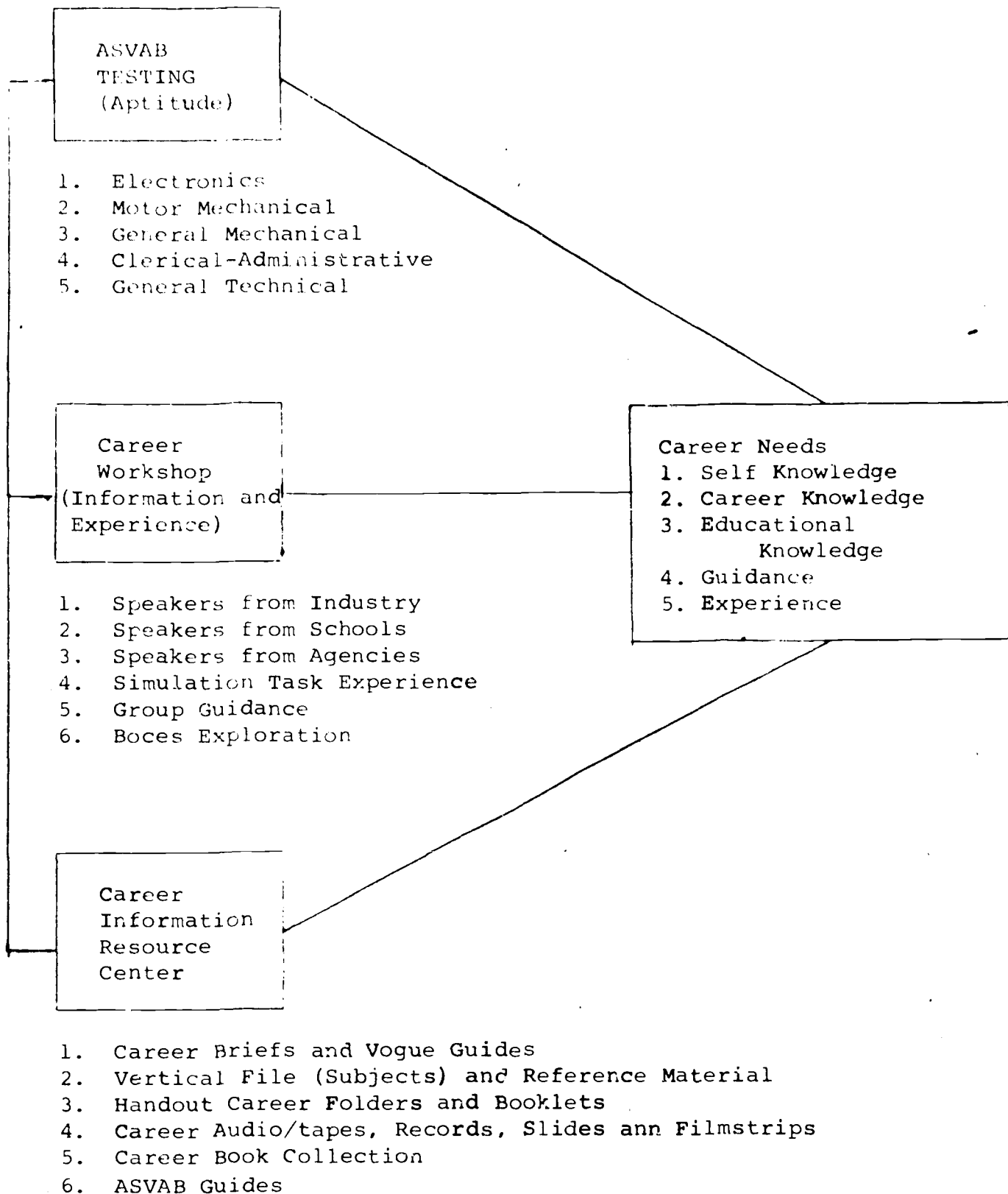
In May of 1971, the Regents of the University of the State of New York proposed an action policy concerning occupational education which states that "New York State needs to develop a comprehensive system of occupational education.....and that occupational education in the elementary, middle and secondary years will provide all students with the basis for informed decisions regarding their occupational and educational plans for the immediate future.."

Thus the Guidance Department of Walt Whitman High School through its Career Guidance Service is already committed to the Comprehensive Career Education Concept as put forth by the U. S. Office of Education and the Regents of the University of the State of New York.



# ELEMENTS OF THE CAREER GUIDANCE SERVICE

(MODEL)



## CAREER GUIDANCE SERVICE (BRIEF DESCRIPTION)

The CGS is composed of three distinct but interlocking elements:

1. ASVAB Testing
2. Career Workshop
3. Career Information Resource Center

## ASVAB TESTING (ARMED SERVICE VOCATIONAL APTITUDE BATTERY)

The Battery is a group of nine paper and pencil tests that are combined into groups of two or more tests called Aptitude Areas and a single score is computed for each area. Justification for using ASVAB is based on the common knowledge that different occupations require different aptitudes. Therefore, tests that measure specific aptitudes may predict success or failure with more accuracy than general intelligence or overall ability tests. The composite coefficient of validity for all five aptitude areas is .60 which is a relatively good predictive indicator... It is very unusual for a validity coefficient to rise above .60, which is far from prediction but more accurate than guesses.

The student will receive his aptitude profile in a booklet which explains the scores and gives valuable information on how to use them. These booklets are given to the student at an ASVAB group guidance session by the counselor. The group guidance session is used for the sole purpose of assisting the student with the information derived from the scores in each Aptitude Area. The stress is on "how to use this new information" and not the mere fact that the score indicates "probable success" in a specific Area. An exercise is provided during the session whereby the student takes his aptitude profile and correlates his strong Areas with the more than 700 civilian occupations found in the ASVAB Guide.

Although ASVAB does not measure interest, personality or needs which are also significant in career making decisions, it can stimulate interest and reveal information that otherwise may not be known. Thus ASVAB tells the student a little more about himself which does fulfill a basic career need.

## CAREER WORKSHOP

The Career Workshop provides the student with updated and relevant information from a variety of people in the field. A presentation may consider one career or multiple careers depending on the situation. Speakers are asked to include in their presentations such items as: type of work, requirements, work conditions, employment outlook, salary etc.

With smaller groups the speaker may set up a simulated task experience which is invaluable for the insight it conveys into that specific career

The workshop concept is broadened by the augmentation of the Career Exploration Program to the local BOCES center. Any interested student can spend up to two weeks for half a day in a specific occupational program. This is a most realistic "hands on experience" which will give in depth exposure to the craftsman-trainee level of particular occupation.

Group guidance sessions will be utilized for a variety of career information experiences which will stress the "use of the information on the many facets of the world of work".

### CAREER INFORMATION RESOURCE CENTER

The Career Information Resource Center is located in a room within the South Library of Walt Whitman High School. It is an integral part of the Career Guidance Service under the supervision of the vocational counselor and guidance intern.

Career information in the center consist of reading materials: books hand cover pamphlets, paper pamphlets and, in addition to classified materials, assorted free material is available including two sets of the Encyclopedia of Careers, two volumes of the Occupational Outlook Handbook, '72-'73 edition and a complete set of the Dictionary of Occupational Titles. Records, tapes slides and cound filmstrips are also available.

The library aides have been very cooperative and enthusiastic about working with students who use the career center. Each library aide has been oriented to the career center concept and vriefed on its contents and how it should function. This is very important since the vocational counselor and guidance intern can only spend a minimum amount of time at the center. However, there is a system of referral for students who need guidance from their respective counselors on any particular question that may come up when using the available career information at the center.

Although the center exists for the students and counselors it has much value for staff and parents alike if they wish to avail themselves of its services.

### CONCLUDING STATEMENT

In essence the three elements of the career Guidance Service provides a variety of experiences to help the student develop his ability to make tentative career choice based on information about self and the world of work.

## REFERENCES

1. Circle, D; Clemens, D; Troll A, Overholt D.  
The Career Information Service: A Guide to Its  
Development and Use. Massachusetts Department of  
Education, Massachusetts 1968.
2. Regents of the University of New York, Occupational  
Education: A Statement of Policy and Proposed Action.  
The State Education Department, Albany 1971.
3. U. S. Department of Health, Education and Welfare:  
Career Education. U. S. Government Printing Office,  
Washington 1971
4. Biggers, J. L. The Use of Information in Vocational  
Decision-Making. The Vocational Guidance Quarterly  
1971, 19, 171-176.
5. Ginzber, E.; Toward a Theory of Occupational Choice:  
A Restatement. The Vocational Guidance Quarterly,  
1972, 20, 169-175.
6. U. S. Department of Health, Education and Welfare  
Career Education Comments, U. S. Government Printing  
Office, Washington, 1972
7. Department of Defense, High School Counselors  
Manual on the Armed Services Vocational Aptitude  
Battery, U. S. Government Printing Office,  
Washington, 1972.
8. Center for Vocational and Technical Education,  
Developmental Program Goals For the Comprehensive  
Career Education Model; Preliminary Edition:  
Ohio State University Press, August, 1972.

## ACKNOWLEDGEMENTS

I wish to express my gratitude to Walter Adams, Chief of the Guidance Unit, Comprehensive Career Education Model, CVTE, Ohio State University for his initial review and recommendations. I am especially grateful to Charles Bell, Research Associate at the Center for Vocational and Technical Education for his technical assistance and comprehensive review of Whitman's Career Guidance Program.

## TABLE OF CONTENTS

1. Introduction
2. Evaluation Instrument and Results
3. Conclusions
4. Recommendations
5. Career Guidance Survey Instrument
6. Review and Recommendations by Guidance Unit (CCEM), the Center for Vocational Technical Education, Ohio State University

## INTRODUCTION

The "Career Guidance Service" implemented at Walt Whitman during the academic year 1972-1973 was designed as a school based MODEL for developing career and self awareness in high school students.

During the first year operational objectives were indentified in order to maintain a developmental continuum in the program. A survey instrument was designed in order to measure whether or not the objectives were being met, as well as to provide information for program analysis and development.

The Career Guidance Survey contains a great deal of information and it will be many months before a complete analysis can be made from specific data and correlations. However, this report includes a rather comprehensive evaluation of the initial reviewing of data.

## EVALUATION INSTRUMENT AND RESULTS:

The survey instrument was given to those students who took the Armed Services Vocational Aptitude Battery (ASVAB). Four hundred students were tested with ASVAB and two hundred and eighty one returned the completed survey. Thus our sample represents 70.25% of the tested population. On each of the completed forms the student indicated grade level and sex. This information will have significance later on when trend analysis is needed.

The following information in the form of percentages was computed by calculator several times in order to mitigate against error.

## RESULTS:

1. 74.02% of the students felt they learned more about themselves in the area of aptitudes by taking the ASVAB.
2. 78.28% indicated that they learned from ASVAB that different occupations require different aptitudes.
3. 92.17% indicated that they were not aware of the many different types of occupations listed in the ASVAB guide.

## RESULTS: (continued)

4. 87.18% indicated that the information obtained from the ASVAB stimulated their interest to investigate careers in greater depth.
5. 96.08% indicated that they were aware of the Career information Resource Center as the base for career information and materials.
6. 96.79% indicated that they liked the idea of workshops in order to learn about different careers.
7. The students were asked to check off the five most important areas of information they would want to know when investigating a possible career. The list contained 10 items and they will be enumerated below from the most important to the least important.

### MOST IMPORTANT TO LEAST IMPORTANT

1. Education or Training Required
  2. Type of Work (Service rendered, deal with people, things etc)
  3. Interest in the Career
  4. Starting Salary
  5. Aptitudes and Skills Required
  6. Promotion Opportunities
  7. Working Conditions
  8. Employment Projection for the Career
  9. Fringe Benefits & Vacations
  10. Status-Prestige of Career
8. The last item on the survey was a question concerning interest in taking a 2 - 3 week course in "Career Awareness" during study hall. 75.80% of the students indicated that they were interested in taking the course. (See brief description on the survey instrument)



## CONCLUSIONS:

The results of the evaluation indicated that the operational objectives of the program were met adequately. The students gained a certain amount of sophistication to determine what information might be necessary to know when investigating a possible career choice.

The one major item is the fact that 87% of the students indicated that the ASVAB provided necessary information about themselves and stimulated their interest to investigate careers in greater depth.

The students indicated a need for continuum assistance in the total sphere of career planning and self study.

## RECOMMENDATIONS:

1. The Armed Services Vocational Aptitude Battery (ASVAB) should be continued as the prime testing instrument for aptitude profile, stimulating interest and providing information.
2. The Career Information Resource Center located in the south library should be expanded to include more career information and materials, a professional resource collection on Career Education and a multi media collection on Career Education. It is understood that this expansion will need additional space in the south library.
3. A guidance based curriculum unit that integrates the concept of self study and career planning should be developed and implemented on an experimental basis in order to follow through with the assessed student needs of career and self-awareness. The curriculum unit will include topics on interests, aptitudes, values, decision making, career information and career planning.
4. The guidance based unit should be taught by a counselor since he possesses the skill and expertise to deal with the subject matter of the unit.
5. Room 212 should be developed into a Career Education Laboratory. This Laboratory will be used for the teaching of the guidance curriculum unit, seminars and inservice training of school personnel on the rudiments and spectrum of Career Education.

GRADE \_\_\_\_\_

FEMALE \_\_\_\_\_

MALE \_\_\_\_\_

CAREER GUIDANCE SURVEY

The answers to this survey are very important to evaluate our Career Guidance Program. Please answer the questions completely and return the "Survey" to the Guidance Department as soon as possible.

1. Did you learn more about yourself in the area of aptitude by taking the ASVAB? Yes 74.02% No 25.98%
2. Did you learn from the ASVAB that different occupations require different aptitudes? Yes 78.29% No 21.71%
3. Were you aware of all the occupations listed in the ASVAB guide before you took the battery? Yes 7.83% No 92.17%
4. Did the information obtained from the ASVAB stimulate your interest to investigate careers in greater depth? Yes 87.18% No 12/82%

Please explain your answer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Does the high school provide a place where you can obtain career information and materials? Yes 96.08% No 3.92%
6. Do you like the idea of having workshops in order to learn about different careers? Yes 96.79% No 3.21%
7. Please check off the five most important areas of information you would want to know when investigating a possible career choice:

1. Education or training required	<u>1</u>
2. Starting Salary	<u>4</u>
3. Promotion Opportunities	<u>6</u>
4. Status-Prestige of Career	<u>10</u>
5. Type of Work (Service rendered deal with people, things etc.)	<u>2</u>
6. Working conditions	<u>7</u>
7. Aptitudes and Skills Required	<u>5</u>
8. Interest in the Career	<u>3</u>
9. Fringe Benefits & Vacations	<u>9</u>
10. Employment Projection for the Career	<u>8</u>

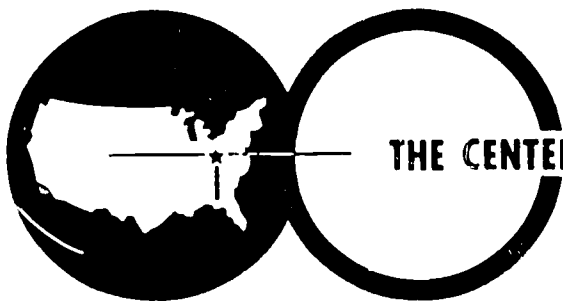
8. Would you be interested in taking a 2 or 3 week mini-course in "Career Awareness" during study hall?

The course will help the student understand the variety of occupations found in the world of work. It will also help the student recognize the relationship of his interests, aptitudes, and achievement to the realization of his career goals.

Indicate Interest:

Yes 75.80% No 24.20%

INFORMAL REVIEW BY GUIDANCE ELEMENT OF  
THE COMPREHENSIVE CAREER EDUCATION MODEL  
AT THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION OF  
THE OHIO STATE UNIVERSITY



## THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION

Phone (614) 486-3655

THE OHIO STATE UNIVERSITY  
1960 KENNY ROAD  
COLUMBUS, OHIO 43210

July 3, 1973

Mr. Ronald Pastrana  
Occupational Services Coordinator  
Career Education Project  
Walt Whitman High School  
Huntington Station  
Long Island, New York 11766

Subject: Informal Review

Dear Mr. Pastrana:

This review is written upon request and should in no way be construed as a recommendation or an endorsement of the "Career Guidance Program".

My first impressions, after reviewing the data, were very favorable and further examination of the "Career Guidance Survey" and its results seems to indicate that a very robust program was designed and implemented.

It's very uncommon for a program to be evaluated by its recipients and for the designer of the program to develop a reasonable survey instrument without outside consultation. This kind of professional work is to be commended.

A more specific review indicates the following:

- a. These students learned more about themselves and the aptitudes they possess;
- b. They seem to understand that different combinations of aptitudes are "required" for different jobs;
- c. They seem to be aware of more job possibilities;
- d. They are interested in getting more information about jobs and know where they can obtain that information;
- e. They are reasonably aware of the kinds of information about jobs which would be important to know before making a choice; and
- f. They would be interested in taking further "courses" during study halls to which relate to career exploration and awareness.

Mr. Ronald Pastrana  
July 3, 1973  
Page 2

Alternative hypotheses to the overall favorability of the program could be: (1) This kind of program is voluntary and non-evaluational, therefore I can't be hurt by it; (2) this program is better than "study halls" and may even be enjoyable; and (3) I feel some obligation to give a favorable comment since I wouldn't want to say I wasted my time after having participated.

It's very difficult to rule out these possibilities but one should be aware that they exist and that one should be cautious in instituting mandatory courses because they appear helpful.

In closing I would add that I have talked briefly with the program designer and have suggested some changes in the evaluational instrument. I would also suggest further follow-up surveys and possibly sequencing several courses which would eventually lead to placement.

Sincerely,



Charles Bell  
Research Associate  
The Center for Vocational and  
Technical Education

CB/ds

UNDERSTANDING MY APTITUDES  
(AN INFORMATION PACKET)

by  
Ronald R. Pastrana  
Occupational Services Coordinator, Career Education Project  
Walt Whitman High School  
Huntington Station, New York

presented at the  
Interservice Counseling and Placement Battery (ASVAB) Workshop  
American Personnel and Guidance Association Convention  
April 8 - 11, 1974  
New Orleans, Louisiana

in cooperation with  
The Armed Forces Vocational Testing Group  
(Department of Defense)

## Introduction

A central aim of this joint-workshop is to familiarize the educational community with the merits and use of the Armed Services Vocational Aptitude (ASVAB) as a career planning instrument.

The information and materials found in this packet and in the companion report "Career Guidance Service" represent the strategies used by Walt Whitman High School to infuse ASVAB into the secondary curriculum.

The exact material presented here was extracted from the publication \*Career Guidance In The Classroom: A Resource And Instructional Manual. The topic "Understanding My Aptitudes" is one of ten different topics that comprise the guidance based teaching unit entitled "Self Study and Career Planning".

"Understanding My Aptitudes" attempts to develop in the student, an appreciation for the fact that different opportunities in his future require different patterns of abilities. The topic will also help the student to understand the meaning behind his scores on the Armed Services Vocational Aptitude Battery (ASVAB) and the Differential Aptitude Tests (DAT). Throughout the topic the stress is on how to use the scores for career planning purposes.

The following pages fall into two categories: pages 20, 21 and 22 constitute the counselor's lesson plan and pages 57-62 include all student worksheets and an example of a typical page from the ASVAB Guide.

- \* Career Guidance In the Classroom: A Resource and Instructional Manual was written by Ronald Pastrana and published by the Board of Cooperative Educational Services (BOCES III), Dix Hills, New York, Dec. 1973.

**(MODEL)**  
**CAREER GUIDANCE CURRICULUM UNIT**  
**"SELF STUDY AND CAREER PLANNING"**

**TOPIC 5**

Topic Title: Understanding My Aptitudes

Grade Level: 10-12 (flexible)

Time: 2-3 hours

**Objectives:**

1. To help the student find out more about himself in the area of Aptitudes.
2. To help the student understand the concept of aptitude in order to further assess his school and career goals.

**Preparation:**

1. Reproduce sufficient copies of the material or vocabulary terms and definitions to be used with this topic.
2. Compile (ASVAB) Armed Services Vocational Aptitude Battery Material to be used with this topic.

**Key Points:**

1. Aptitude is the capacity to learn in a particular area.
2. An aptitude score may be used as an indication for "probable success" in an occupation that requires that specific aptitude.
3. Aptitude potential can be developed.
4. An aptitude area is a combination of specific abilities.

**Learning Activities and Teaching Strategies**

- I. Developing the concept "Aptitude".
  - A. Lead questions for discussion of aptitudes.
    1. What is an aptitude?
    2. How many kinds of aptitudes are there?
    3. How does aptitude relate to who I am and where I am going?
    4. What is the DAT and ASVAB?



- B. At this point develop with the students a **working definition** of aptitude as a combination of abilities believed to be indicative of one's capacity to learn in some particular area.

Ex.: "musical aptitude" - a combination of physical and mental characteristics and motivational factors which are conducive to acquiring proficiency in the musical field.

- C. It is important for the student to see aptitude as the capacity to learn.

- II. At this point introduce the student to the various aptitude areas found in the Differential Aptitude Tests and the Armed Services Vocational Aptitude Battery.

- A. Differential Aptitude Tests (DAT)

- 1. Verbal Reasoning
- 2. Numerical Ability
- 3. Abstract Reasoning
- 4. Clerical Speed and Accuracy
- 5. Mechanical Reasoning
- 6. Space Relations
- 7. Spelling
- 8. Language Usage

- B. Armed Services Vocational Aptitude Battery (ASVAB)

- 1. Electronics
- 2. General Mechanical
- 3. Motor Mechanical
- 4. Clerical Administrative
- 5. General Technical

- C. Distribute the handout material on terms related to the DAT, ASVAB, and standardized tests in general.
- D. The counselor will review with the class each of the aptitude areas in the DAT and ASVAB and discuss any questions that may arise. The discussion will more than adequately give the students an appreciation for the variety of aptitude areas that exist.

### III. How does aptitude relate to who I am and where I am going?

- A. Explain to students that different **opportunities** in their future require different kinds of aptitudes. Their school and career goals will be influenced by their aptitude profile. Their success in any field will, of course, depend a great deal on their aptitudes in the areas that are important to that field.
- B. For the next class session the counselor should tell the students to make an appointment in the guidance office with their counselor to obtain their scores from the DAT and the ASVAB.

### IV. Interpreting your DAT and ASVAB scores.

- A. By now the class should understand the meaning of the general terms used by the DAT and ASVAB: quartile, percentile, aptitude, aptitude area, and the general meaning of scores.
- B. What does the aptitude score indicate?
  - 1. The aptitude score may be used as an indicator for "probable success" in an occupation that requires that specific aptitude.
  - 2. The DAT will give you a profile showing your strong abilities and weak abilities.
  - 3. The ASVAB will give you a profile showing your strong aptitude areas and weak aptitude areas.

### V. Administration of the test.

- A. Distribute the DAT and ASVAB worksheet whereby each student will learn that specific conclusions can be drawn from his own set of scores.
- B. It is important for the student to realize that he must include his general achievement in school along with his aptitude profile to obtain a true picture of his abilities.

### VI. Can aptitudes be developed?

You already have an idea of the areas where your abilities and aptitudes are high and where they could still be developed. If you want to change your weak areas you just have to be willing to work hard at it. You can for the most part develop your abilities and aptitude areas!!

### Summary:

In summarizing the topic the counselor should, through student questions and class discussion, arrive at the general conclusion that our abilities and aptitudes constitute a key factor in determining the kind of work we will do. We should consider our strong abilities and aptitudes and note that our weak areas for the most part can be developed with hard work! Even though we have the ability or aptitude for an occupation, we must also consider other factors like interests, values, attitudes, etc.

UNDERSTANDING MY APTITUDES

WORKSHEET

(On this sheet you will learn what specific conclusions can be drawn from your DAT and ASVAB scores.)

(DAT)

- 1 List the ability area or areas which are your particular strong ones:

_____	_____
_____	_____

- 2 In which quartile (first, second, third or fourth) does your VR + NA score fall?

\_\_\_\_\_

- 3 What does this score indicate to you?

\_\_\_\_\_

\_\_\_\_\_

- 4 List some careers that make use of your strong DAT ability areas:

_____	_____
_____	_____
_____	_____

- 5 List the area or areas which are weak:

_____	_____
_____	_____

- 6 What do these weak areas mean to you?

\_\_\_\_\_

\_\_\_\_\_

7. Does the information obtained from the DAT scores confirm or contradict what you already thought about your abilities? \_\_\_\_\_ What type of plans will you make due to the information obtained?

---

---

(ASVAB)

8. List the aptitude areas which are your particular strong ones:

_____	_____
_____	_____

9. In which percentile does your General Tech score fall? \_\_\_\_\_

10. What does this score indicate to you?

---

---

11. List some careers that make use of your strong ASVAB aptitude areas:

_____	_____
_____	_____
_____	_____
_____	_____

12. How do you see yourself in light of the information gathered from the DAT and ASVAB?

---

---

---

---

---

---

UNDERSTANDING MY APTITUDES

INFORMATION ON THE DAT, ASVAB, AND STANDARDIZED TEST

VOCABULARY

Standardized Test Vocabulary

Aptitude:

The capacity to learn.

Differential:

The difference between two.

Evaluation:

Estimate of nature or value of something or someone.

Norm:

A set standard of achievement usually derived from the average achievement of a large group.

Percentile:

Dividing individual scores into one hundred groups of equal frequency.

Profile:

The outline of something.

Quartile:

Dividing the distribution of the individuals into four groups of equal frequency.

Standardized Test:

A test which has been given to many people of different backgrounds over a period of time.

(ASVAB)

The (ASVAB) is a nine component ability test.

1. Coding Speed Test (CS)

In this speed test there is a Key and 100 items. The Key is a group of words with a code number for each word. Each item presents one word for which the student indicates the code number.

2. Word Knowledge (WK)

Each item requires the student to select the best synonym or definition for a specified word.

3. Arithmetic Reasoning (AR)

Each item is a reasoning problem involving application of arithmetic processes.

4. Tool Knowledge (K)

Each item presents five drawings of various tools or shop equipment. The student indicates which of the four alternative drawings goes best with the lead drawing.

5. Space Perception (SP)

Each item consists of five drawings, a pattern and four boxes. The student determines which one of the boxes can be made by folding the given pattern.

6. Mechanical Comprehension (MC)

Each item includes a drawing or drawings illustrating some physical principle and a question concerning it.

7. Shop Information (SI)

This test has questions about shop practices and the use of tools. Many of the items contain drawings.

8. Automotive Information (AI)

Each item asks a question about the identification or operation of automobile parts.

9. Electronics Information (EI)

This test has questions about elementary principles of electricity and about electrical or electronic devices.

### ASVAB Aptitude Areas

Each of the above sub-tests can be combined in special ways to form Aptitude Areas.

- |                        |   |
|------------------------|---|
| 1. Electronic=         | Mechanical Comprehension +<br>Electronic Information. |
| 2. General Mechanical= | Space Perception +<br>Shop Information.               |
| 3. Motor Mechanical=   | Mechanical Comprehension +<br>Automotive Information. |

- |                             |   |
|-----------------------------|---|
| 4. Clerical Administrative= | Word Knowledge +<br>Coding Speed.         |
| 5. General Technical=       | Word Knowledge +<br>Arithmetic Reasoning. |

Each one of the above aptitude areas corresponds to particular occupations found in the ASVAB Guide. You can correlate your strong aptitude areas with the more than 700 civilian occupations in the guide.

## (DAT)

### Differential Aptitude Tests

#### 1. Verbal Reasoning

To understand, think, and reason with words -- an ability needed in almost all school subjects but especially important in courses that require extensive reading or class discussion such as English, Social Studies, Science and History. The ability to understand and use ideas expressed in words is important in jobs such as teacher, guidance counselor, social worker, reporter, editor, lawyer -- and in jobs as diverse as life insurance salesman, policeman, bank teller, restaurant hostess, car rental clerk, and hospital attendant.

#### 2. Numerical Ability

To reason with numbers and solve mathematical problems -- an ability related to the mastery of school subjects that require quantitative thinking such as business arithmetic, algebra, geometry, chemistry, and physics. Specific occupations require varying degrees of numerical ability -- important in jobs such as economist, engineer, credit analyst, cost accountant, insurance underwriter, market research analyst, mathematician and statistician -- and needed in a variety of other jobs such as account executive, bank manager, broker, business manager, sales clerk, salesman, surveyor, and weather observer.

VR + NA (Verbal plus Numerical)

An efficient indicator of general scholastic aptitude, the ability to learn from books and lectures and to master school subjects.

#### 3. Abstract Reasoning

To think logically without words or numbers, to see and manipulate mentally the relationships among things, objects, patterns, diagrams or designs -- an ability useful in shop, drafting and laboratory courses. Useful for computer programmers, systems analysts, and scientists. A special use of the Abstract Reasoning Test is the comparison of the score with that achieved on the Verbal Reasoning Test for students with foreign language backgrounds. The Abstract Reasoning score may be the better indicator of the foreign student's readiness to learn.

#### 4. Clerical Speed and Accuracy

The ability to compare and mark simple letter and number symbols quickly and accurately -- a perceptual-motor skill useful in business courses and in clerical tasks such as filing, coding, library cataloging, and stock room work. Needed for jobs such as bank teller, business manager, broker, cashier, clerk, cost accountant, salesman, stenographer, and typist.

#### 5. Mechanical Reasoning

To understand mechanical principles and devices and apply laws of everyday physics -- to understand how appliances work and how tools are used. Courses in the physical sciences, technical studies, and manual training are easier for students who have mechanical reasoning ability. Useful in a wide variety of occupations such as auto mechanic, bulldozer operator, carpenter, drill press operator, longshoreman, photo-engraver, policeman, medical technologist, and engineer.

#### 6. Space Relations

To "think in three dimensions" or picture mentally the shape, size, and position of objects. An ability that is helpful in geometry, drafting, art and design courses. Useful in jobs such as architect, bus driver, cabinet maker, die-maker, draftsman, dress designer, dental hygienist, geologist, nurse, and surveyor.

#### 7. Spelling

To recognize correct and incorrect spellings of common English words. The ability to spell correctly is needed for written reports in any school subject. Predicts success in typing and stenographic courses. Needed for jobs such as secretary, technical manual writer, editor -- any job using writing skills.

#### 8. Language Usage

Sensitivity to language structure, to recognize correct and incorrect word usage, grammar, and punctuation. An ability needed in English and other school subjects requiring class discussion and written reports. Command of language is needed in jobs such as copywriter, editor, lawyer, reporter, teacher, salesman -- any job requiring written or oral communication.



# ASVAB GUIDE

## MEDICAL CARE AND TREATMENT

Military Occupation	Related Civilian Occupation And Occupational Title (D.O.T.) Code	ASVAB Percentile	Additional Criteria
Medical Corpsman	Nurse, Practical (354.878)	50	
Clinical Specialist	Nurse, Licensed, Practical (079.378)	50	High School Math or Standard Score of 45 in GED " t 5
Operating Room Specialist	Surgical Technician (079.379)	50	
Social Work/ Psychology Specialist	Psychometrist (045.088) Psychologist, Clinical (045.108)	50 50	Must be Emotionally stable & Mature. Be able to Communicate Both Orally & in Writing
Physical Therapy Specialist	Physical Therapist (079.378)	50	
X-Ray Specialist	X-Ray Equipment Tester (729.281) Radiologic Technologist (078.368)	50	Credit for Satisfactory Completion of Courses in Algebra & Basic Sciences